at1110paper_practice_test (v2)

1. Expand the following expression into standard form.

$$(2x + 3)(4x + 9)$$

2. Solve the equation.

$$(3x + 4)(2x + 7) \ = \ 0$$

3. Expand the following expression into standard form.

$$(2x - 7)(2x + 7)$$

4. Expand the following expression into standard form.

$$(6x + 7)^2$$

5. Factor the expression.
$$x^2 + 4x - 12$$

6. Factor the expression.
$$25x^2 - 49$$

7. Solve the equation with factoring by grouping.
$$10x^2 + 15x + 12x + 18 \;=\; 0$$

8. Solve the equation.
$$6x^2 + 24x + 45 \;=\; 4x^2 + 3x + 5$$